Methodology

Research Objectives

At the outset of this project, the City of Henderson and Godbe Research identified several research objectives for this study. Viewed broadly, the City of Henderson was interested in using survey research to:

- Determine residents' overall satisfaction with the City's efforts to provide services;
- Ascertain both the level of importance and the degree of satisfaction that residents assign to recreation services, services related to growth and the economy, public safety services, and various additional services provided by the City;
- Examine respondents' perceptions of their quality of life in Henderson and the relative importance of various items on quality of life;
- Assess respondents' sense of community;
- Identify satisfaction with City-resident communication and respondents' preferred methods of accessing information about City services;
- Profile the demographic, attitudinal, and behavioral characteristics of adult residents in the City of Henderson.

Survey Methodology

Table 1 briefly outlines the methodology utilized in the survey. The sample was comprised of adult residents in the City of Henderson. A total of 1,000 residents in the City completed an interview in English, representing a total universe of approximately 169,770 adult residents in the City of Henderson (2004 projection data[i]). Interviews were conducted on February 17 through February 23, 2004 and each interview typically lasted 22 minutes.

Table 1 Methodology

Technique	Telephone interviewing
Interview Length	22 minutes
Universe	Adult residents in the City of Henderson
Field Dates	February 17 through 23, 2004
Sample Size	1,000

Sample & Weighting

Respondents were selected using random digit dialing (RDD), which randomly selects phone numbers from the active residential phone exchanges within the City of Henderson. Interviewers first asked potential respondents a series of questions, referred to as screeners, which were used to ensure that the person lived within the City and was at least 18 years old. The first screener was used to correct one of the inherent tendencies of the RDD method to over-sample older residents and women. Specifically, RDD samples typically over-represent women and older residents because they are often more likely to be home in the early evening or on the weekend

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[i] 2004 projection data provided by the City of Henderson.

and are also more likely to answer the telephone. To adjust for this bias, interviewers asked to speak to the youngest adult male currently available in the household. If an adult male was not available at the time of the call, the interviewer asked to speak to the youngest adult female currently available.

Another screener asked respondents to identify their zip code of residence. Respondents living in zip codes 89123 and 89124 were also asked whether they lived within the boundaries of Henderson. Respondents who did not know their zip code were thanked and the interview was terminated.

In addition, respondents were asked if they had recently completed and mailed back a survey from the City of Henderson. Respondents who had completed a mail survey were thanked and the interview was terminated (to avoid over-representing the opinions of any one individual in the City's multiple research endeavors). If a potential respondent met all of the criteria for inclusion in the study, they were then given the opportunity to complete the survey.

Once collected, the data were compared with 2004 projection data to examine possible differences between the sample and the population of residents 18 years and older within the City on major demographic variables. After examining the dimensions of gender, age, and zip code[ii], the data were weighted to correct for deviations in age and gender in order to accurately represent the adult population of Henderson residents.

Subgroup Labels

Subgroups identified throughout the analysis are presented in the table below.

Table 2 Subgroup Labels

Subgroup Label	Respondents were grouped:
Age	According to their age: "18-24 years," "25-34 years," "35-44 years," "55-59 years," "60-64 years," and "65+ years" (Question H).
Quality of Life	By whether they believed that the quality of life in Henderson was "Getting better," "Staying the same," or "Getting worse" (Question 6).
Heard About 50 Year Anniversary	According to whether they had heard, read, or seen any news story, advertisement, or announcement about the City of Henderson's 50-year anniversary in the past six months (Question 24).
Community Identification	Based on where they said they lived when asked by someone locally: "Henderson," "Green Valley," "Las Vegas," or "Other" (Question ii).
Origin	Based on where they lived before they first moved to Henderson: "Northeast U.S.," "Midwest U.S.," "South U.S.," "West U.S. (non-CA)," "California," "Another City in NV," or "Henderson" (always lived in Henderson) (Question 2).
Place of Work	By the area in which they worked: "Henderson," "Las Vegas Strip," "Downtown Las Vegas," "North Las Vegas," "McCarran Airport area," "Other Clark County," "Outside Clark County," or "Unemployed/ retired" (Question 3).
Sense of Community Levels	According to their sense of community level as determined by responses to Questions 8 and 9a through 9f. Residents that agreed with at least six of the seven questions were categorized as feeling a "High" sense of community. Respondents that agreed with only one or none of the questions were classified as having a "Low" sense of community. Residents in between the two extremes were identified as having a "Medium" sense of community.
Length of Residence	Based on how long they had lived in Henderson: "Less than 1 year," "1-4 years," "5-9 years," "10-14 years," or "15 years or more" (Question 1).
Satisfaction with City's Provision of Services	By respondents' general satisfaction with the City's provision of services: "Very satisfied," "Somewhat satisfied," "Somewhat dissatisfied," or "Very dissatisfied" (Question 4).

[ii] For zip code, the sample was compared to population projections for the total population due to data availability.

Subgroup Label	Respondents were grouped:
Gender	By their gender.
Interaction with a City Dept. in Past Year	According to whether or not they had interacted with a City department in the past year (Question 18).
City's Communication Efforts	By their satisfaction with the City's efforts to communicate with residents: "Very satisfied," "Somewhat satisfied," "Somewhat dissatisfied," or "Very dissatisfied" (Question 20).
Number of Children	According to the number of children living in their household: "None," "One," "Two," "Three," or "Four+" (Question C).
Preference for Information Access	By their preferred method of accessing information about City services: "Phone," "In-person," "Internet," "Mailer/ Newsletter," "Newspaper," or "Television" (Question 22).
Home Ownership	Based on whether they owned or rented (Question D).
Belong to HOA	Owners were asked whether or not they belonged to a homeowners' association (Question E).
Household Income	According to their household income: "$20,000 or less," "$20,001 to $40,000," "$40,001 to $60,000," "$60,001 to $80,000," "$80,001 to $100,000," or "$10,001 or more" (Question H).

Randomization of Questions

To avoid the problem of systematic position bias -- where the order in which a series of questions is asked systematically influences the answers to some of the questions -- several of the questions in this survey were randomized such that respondents were not consistently asked the questions in the same order. The series of items in Questions 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, and 23 were randomized in the questionnaire.

Understanding the "Margin of Error"

Because a survey typically interviews a limited number of people who are part of a larger population group, by mere chance alone there will almost always be some difference between a sample and the population from which it was drawn. For example, researchers might collect information from 400 adults in a town of 15,000 people. Because not all people in the population were surveyed, there are bound to be differences between the results obtained from interviewing the sample respondents and the results that would be obtained if all people in the population were interviewed. These differences are known as "Sampling error" and they are expected to occur regardless of how scientifically the sample has been selected. The advantage of a scientific sample is that we are able to estimate the amount of sampling error that occurs. Sampling error is determined by four factors: the size of the population, the chosen sample size, a confidence level, and the dispersion of responses to a survey.

The following table shows the possible sampling variation that applies to a percentage result reported from a probability type sample. If a sample of 1,000 adult residents in the City of Henderson is drawn from the estimated population of approximately 169,770 adult residents, one can be 95 percent confident that the margin of error due to sampling will not vary, plus or minus, by more than the indicated number of percentage points from the result that would have been obtained if the interviews had been conducted with all persons in the universe.

Table 3 Margin of Error

n	Distribution of Responses				
	90% / 10%	80% / 20%	70% / 30%	60% / 40%	50% / 50%
1,500	1.51%	2.02%	2.31%	2.47%	2.52%
1,250	1.66%	2.21%	2.53%	2.71%	2.76%
1,000	1.85%	2.47%	2.83%	3.03%	3.09%
750	2.14%	2.86%	3.27%	3.50%	3.57%
500	2.63%	3.50%	4.01%	4.29%	4.38%
400	2.94%	3.92%	4.49%	4.80%	4.89%
300	3.39%	4.52%	5.18%	5.54%	5.65%
200	4.16%	5.54%	6.35%	6.79%	6.93%
100	5.88%	7.84%	8.98%	9.60%	9.80%
50	8.31%	11.09%	12.70%	13.58%	13.86%

As the table indicates, the maximum margin of error for all topline responses is between 1.85 and 3.09 percent for the survey. This means that for a given question with dichotomous response options (e.g., a yes/no question) answered by all 1,000 respondents, one can be 95 percent confident that the difference between the percentage breakdowns of the sample population and those of the total population is no greater than 3.09 percent. The percent margin of error applies to both sides of the answer, so that for a question in which 50 percent of respondents said yes, one can be 95 percent confident that the actual percent of the population that would say yes is between 46.91 percent and 53.09 percent.

The actual margin of error for a given question in this survey depends on the distribution of the responses to the question. The 3.09 percent refers to dichotomous questions, such as yes/no questions, where opinions are evenly split in the sample with 50 percent of respondents saying yes and 50 percent saying no. If that same question were to receive a response in which 10 percent of respondents say yes and 90 percent say no, then the margin of error would be no greater than 1.85 percent. As the number of respondents in a particular subgroup (e.g., gender) is smaller than the number of total respondents, the margin of error associated with estimating a given subgroup's response will be higher. Due to the high margin of error, Godbe Research cautions against generalizing the results for subgroups that are composed of 25 or fewer respondents.

How to Read a Crosstabulation Table

The questions discussed and analyzed in this report comprise a subset of the various crosstabulation tables available for each question. Only those subgroups that are of particular interest or that illustrate a particular insight are included in the discussion on the following pages. A typical crosstabulation table is shown in Table 4.

A short description of the item appears at the top of the table. The sample size (in this example, n=1,000) is presented in the first column of data under "Overall." The results to each possible answer choice of all respondents are also presented in the first column of data under "Overall." The aggregate number of respondents in each answer category is presented as a whole number

and the percentage of the entire sample that this number represents is just below the whole number. For example, among overall respondents, 370 people felt the quality of life in Henderson was "Getting better" and 370 represents 37 percent of the total sample size of 1,000. Next to the "Overall" column are other columns representing respondents' sense of community level. The data from these columns are read in exactly the same fashion as the data in the "Overall" column although each group makes up a smaller percentage of the entire sample.

Table 4 Quality of Life by Sense of Community Levels

	Overall	Sense of Community Levels		
		High	Medium	Low
Base	1000	269	616	115
Getting better	370 37.0%	140 52.3%	204 33.0%	26 22.6%
Staying about the same	419 41.9%	96 35.7%	278 45.1%	45 39.2%
Getting worse	170 17.0%	29 10.7%	109 17.7%	33 28.6%
DK/NA/Refused	41 4.1%	4 1.4%	26 4.2%	11 9.7%

Understanding a "Mean"

In addition to analysis of response percentages, many results will be discussed with respect to a descriptive "Mean." "Means" can be thought of as "Averages." To derive a mean that represents perceived importance of local issues on quality of life (Q7), for example, a number value is first assigned to each response category (e.g., "Extremely important" = +3, "Very important" = +2, "Somewhat important" = +1, and "Not at all important" = 0). The answer of each respondent is then assigned the corresponding number (from 0 to +3 in this example). Finally, all respondents' answers are averaged to produce a final number that reflects average perceived importance of the different issues. The resulting mean makes interpretation of the data considerably easier.

How to Read a "Means" Table

In the tables and charts for Questions 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, and 23 of the survey, the reader will find mean scores that represent answers given by respondents. The mean score represents the average response of each group. The following table shows the scales for each corresponding question. Responses of "Don't know" and "No opinion" are not included in calculating the means for any question.

Table 5 Means Questions and Corresponding Scales

Question	Measure	Scale	Values
7, 10, 12, 14, 16,	Importance Ratings	0 to +3	+3 = Extremely important +2 = Very important +1= Somewhat important 0= Not at all important
9	Agreement Ratings	-2 to +2	-2 = Strongly agree -1 = Agree 0 = Neither agree nor disagree +1 = Disagree +2 = Strongly disagree
11, 13, 15, 17	Satisfaction Ratings	-2 to +2	-2 = Very dissatisfied -1 = Somewhat dissatisfied +1 = Somewhat satisfied +2 = Very satisfied
23	Grades	0 to +4	A+ = 4.3 A = 4.0 A- = 3.7 B+ = 3.3 B = 3.0 B- = 2.7 C+ = 2.3 C = 2.0 C- = 1.7 D+ = 1.3 D = 1.0 D- = 0.7 F = 0.0

Only those subgroups that are of particular interest or that illustrate a particular insight are included in the discussion on the following pages with regard to mean scores. A typical crosstabulation table displaying mean scores is shown in Table 6 on page 15.

The items in the table are arranged in descending order, from highest mean score to lowest. The aggregate mean score for each item in the question series is presented in the first column of data under "Overall." For example, among all survey respondents, "Overall feeling of safety" was assigned a mean score of 2.31. The relative ranking of the item reveals that it was the most important factor influencing quality of life of those tested. In addition, the 0 to +3 scale used for Question 7 indicates that, on average, respondents rated "Overall feeling of safety" as more than "Very important" (+2 = "Very important"). Next to the "Overall" column are other columns representing the mean scores assigned by respondents grouped by gender. The data from these columns are read in the same fashion as the data in the "Overall" column. In addition, the first row in the table, labeled "Base," displays the mean score across all the items presented in the table for each subgroup. For example, the "Overall" mean score across the 12 items displayed in Table 6 is 1.82. Without examining the specific mean for each item, the "Base" score gives the reader an idea of a subgroup's average rating across all items in the table. Thus, looking across "Base" scores we see that female respondents had an overall mean score of 1.92, which is higher than the mean assigned by all 1,000 respondents (1.82) as well as higher than male respondents (1.72).

Table 6 Importance of Local Issues on the Quality of Life by Gender

	Overall	Gender	
		Male	Female
Base	1.82	1.72	1.92
Q7b Overall feeling of safety	2.31	2.21	2.40
Q7c Quality of drinking water	2.21	2.06	2.35
Q7k Air quality	2.18	2.05	2.31
Q7a Overall appearance and cleanliness	2.06	1.99	2.13
Q7e Condition of streets and roads	2.02	1.96	2.09
Q7i Affordability of housing	1.92	1.80	2.04
Q7l Availability of job opportunities	1.75	1.67	1.83
Q7d Recreational opportunities	1.66	1.64	1.69
Q7g Sense of community	1.63	1.49	1.77
Q7j Shopping opportunities	1.52	1.40	1.64
Q7f Arts and cultural opportunities	1.37	1.26	1.48
Q7h Availability of public transportation	1.17	1.11	1.24

Open-Ended Questions

Open-ended questions are asked of respondents without providing them specific answers from which to choose. For this type of question, respondents are able to mention any issue, topic, or general response relevant to the question without being constrained by a limited number of options. After data collection was completed, Godbe Research examined the verbatim responses that were recorded and created categories to best represent the responses cited by participants.

Multiple Response Questions

Some questions within the survey were presented as a multiple response format. For this type of question, each respondent is given the opportunity to select more than one response option. For this reason, the response percentages will typically sum to more than 100 and represent the percentage of individuals that mentioned a particular response.

A Note on the Tables

To present the data in the most accurate fashion, we display the results to the first decimal point in the tables and figures. For the purposes of discussion, however, conventional rounding rules are applied, with numbers that include 0.5 or higher rounded to the next highest whole number and numbers that include 0.4 or lower rounded to the next lowest whole number. Because of this

rounding, the reader may notice that percentages in the discussion may not sum to 100 percent. Moreover, the decimal numbers shown in pie charts may vary somewhat from the decimal numbers shown in the tables due to software requirements that pie charts sum to exactly 100 percent. These disparities are confined to the first decimal place.